



The State of New Hampshire
Department of Environmental Services



Michael P. Nolin
Commissioner

February 8, 2006

The Honorable Representative Betsey L. Patten, Chairman
Municipal and County Government Committee
Legislative Office Building, Room 301
Concord, New Hampshire 03301

Re: HB 1760 - AN ACT allowing municipalities to adopt a property tax exemption for property using, manufacturing, or supplying bio-heat systems.

Dear Chairman Patten and Members of the Committee:

The New Hampshire Department of Environmental Services (DES) is writing to support House Bill 1760, which proposes tax exemptions for property owners using, manufacturing, or supplying equipment that allows for use of biodiesel as a heating fuel. While tax policy and the specific nature of tax exemptions is not within our expertise, DES supports the notion of providing incentives to increase the supply and use of this less polluting alternative to diesel fuel and heating oil. By reducing the cost to the user to convert to the use of biodiesel, demand for the fuel should increase, thereby encouraging development of production facilities and additional storage facilities within the state, ultimately leading to reduced cost for the fuel statewide. While this bill only addresses heating oil and heating systems, the resulting lower cost of the fuel is likely to increase the use of biodiesel by the mobile source sector as well. Mobile sources currently account for approximately half of the air pollution in the state.

Petroleum diesel exhaust contains hundreds of different chemical compounds that play a role in ozone formation, regional haze, acid rain and global warming. However, the most significant threat posed by diesels comes from their toxic emissions. Diesel exhaust contains over 40 chemicals that are listed by the Environmental Protection Agency (EPA) and California as toxic air contaminants, known human carcinogens, probable human carcinogens, reproductive toxicants or endocrine disruptors. Based on lifetime risk estimates, diesel exhaust is responsible for 125,000 cancers nationwide.¹ The National Institute for Occupational Safety and Health, the International Agency for Research on Cancer, EPA, and the National Toxicology Program have all consistently agreed that there is a relationship between diesel exhaust exposure and lung cancer.

Through the Granite State Clean Cities Coalition, a public/private partnership of over 55 stakeholders supporting the use of alternative fuels and other petroleum reduction efforts, DES

¹ STAPPA/ALAPCO Officials "Cancer Risk from Diesel Particulate: National and Metropolitan Area Estimates for the United States," March 15, 2000

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has been promoting the use of biodiesel, a domestically produced, non-toxic diesel fuel replacement derived from vegetable oil or animal fat. Biodiesel is most commonly mixed with petroleum diesel fuel in a 20% biodiesel/80% petroleum diesel mix, referred to as B20. Biodiesel can also be used in its neat form, B100, in warmer months or in indoor applications such as heaters, or in any chosen blend ratio. Some equipment modifications may be necessary when using higher blends.

Biodiesel can significantly reduce emissions from mobile and stationary sources. Estimated emission reductions from use of biodiesel in diesel motor vehicles have been shown as follows²:

	<u>B20</u>	<u>B100</u>
Carbon Monoxide	12%	43%
Carbon Dioxide	15%	78%
Volatile Organic Compounds	11%	56%
Particulates	18%	55%
Sulfates	20%	99%
Air Toxics	12 to 20%	60 to 90%
Mutagenicity	20%	80 to 90%

Data on the use of biodiesel in home heating fuel show similar reductions and has the added benefits of reducing emissions of nitrogen oxide emissions and it contains no mercury, thereby reducing those emissions as well.

In addition to the air quality benefits, the use of this domestically produced, renewable fuel helps New Hampshire and the nation reduce the use of imported petroleum. According to the Department of Energy, the United States imported 52.8% of our petroleum in 2002, and the transportation sector used 67.1% of all petroleum consumed in the US in 2002. Currently only 0.7% of transportation energy needs are provided by renewable fuels³.

DES appreciates the opportunity to provide testimony related to House Bill 1760. If you have additional questions please contact me, or Rebecca Ohler of my staff at (603) 271-6749, or rohler@des.state.nh.us.

Sincerely,


Michael P. Nollin
Commissioner

cc: HB 1760 sponsors

2 U.S. Department of Energy, "Biodiesel – Clean, Green Diesel Fuel", September 2001

3 U.S. Department of Energy, "Transportation Energy Data Book", Edition 23, October 2003